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10/580,555	05/26/2006	Marco Ferrato	09952.0055	5976

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EXAMINER	
PHAM, TIMOTHY X	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,555	FERRATO ET AL.	
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/3/2010 have been fully considered but they are not persuasive.

Regarding claims 22 and 36, applicant argues that

"Leila does not teach or suggest the following elements recited in claim 22 (and similarly in claim 36):

...simulating a second configuration of said mobile telephone network;

said first and second configurations of said mobile telephone network

being statistically independent of each other;

each of said simulation steps comprising the steps of:

specifying a total number of users to be simulated;

determining a sequence of activation of user blocks included in said total number of users to be simulated;

activating said user blocks in succession until said total number of users to be simulated is reached, each user block indicating a traffic distribution .... (see Remark page 3-4)", with the corresponding teaching indicating the arguments and the arts references below, the Examiner respectfully disagrees.

First, in the previous Office Action, the Examiner stated that Leila failed to specifically disclose simulating a second configuration of said mobile telephone network; said first and second configurations of said mobile telephone network being statistically independent of each other. However, it would not matter of design choice to perform a second simulation configuration of mobile telephone network being statistically independent to the first simulation configuration since the applicant has not disclosed that the second simulation configuration solves any stated problem or is for any particular purposes and it appears that the invention would perform well with any other network simulation models. The Applicant tried to claim the first simulation configuration and the second simulation configuration which both are independent of each other and are doing the same processes as claimed in claim 22. The Applicant has not disclose the second simulation configuration is for any particular purposes distinct from the first simulation configuration; Therefore, it would be a matter of design choice to set configuration between the first simulation and the second simulation.

Second, Leila discloses specifying a total number of users to be simulated (page 58, Strategy B: Item 1; page 60, section 2; page 64, section 5.3.2); determining a sequence of activation of user blocks included in said total number of users to be simulated (page 58, Strategy B: Items 1 and 2); activating said user blocks in succession until said total number of users to be simulated is reached, each user block indicating a traffic distribution (page 58, Strategy B; page 60, item 2). During patent examination, the claims must be given their broadly reasonable interpretation. See MPEP 2111. The term “specifying a total number of users, determining a sequence of activation of user blocks, activating said user blocks, and processing radio resource management event " is broadly claimed, therefore, it is broadly interpreted.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 22-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leila Zurba Ribeiro (hereinafter "Leila"; "Traffic Dimensioning for Multimedia Wireless Networks"; Public April 17, 2003 in Falls Church, VA).

Regarding claims 22 and 36, Leila discloses a method and simulation equipment for evaluating the performance of a mobile telephone network, comprising the steps of:

simulating a first configuration of said mobile telephone network (page 82, e.g., WCDMA simulation);

each of said simulation steps comprising the steps of:

specifying a total number of users to be simulated (page 58, Strategy B: Item 1; page 60, section 2; page 64, section 5.3.2, e.g., This random variable will represent the number of active user, K in the "picture");

determining a sequence of activation of user blocks included in said total number of users to be simulated (simulated (page 58, Strategy B: Items 1 and 2, e.g., this random activation should follow the probability density of users in the geographical grid; it is noted that the probability density of users characterizes as determining a sequence step of user blocks);

activating said user blocks in succession until said total number of users to be simulated is reached, each user block indicating a traffic distribution (page 58, Strategy B; page 60, item 2, e.g., for the snapshot calculated in that iteration, randomly active K users in the traffic grid (which has a total of N>>K users).)

and processing at least one radio resource management event (page 43, section 4.3.1) relating to the traffic distribution (Page 120, table 6-17; Page 137, e.g., traffic distribution) associated with each currently activated user block (page 58, Strategy B, Item 5; e.g., process statistics of load offered to each sector).

Leila fails to specifically disclose simulating a second configuration of said mobile telephone network; said first and second configurations of said mobile telephone network being statistically independent of each other.

However, it would not matter of design choice to perform a second simulation configuration of mobile telephone network being statistically independent to the first simulation configuration since the applicant has not disclosed that the second simulation configuration solves any stated problem or is for any particular purposes and it appears that the invention would perform well with any other network simulation models.

Regarding claim 23, Leila discloses the method of evaluating according to claim 22, comprising the step of:

repeating said steps of simulating said mobile telephone network until a predetermined accuracy threshold is reached for each simulated network value (Fig. 5-21; page 58, Strategy B, e.g., for each iteration).

Regarding claim 24, Leila discloses the method of evaluating according to claim 22, wherein each activated user block comprises at least one user (page 58, Strategy B, e.g., this step corresponds to the spatial randomness of the users).

Regarding claims 25 and 37, Leila discloses the method and the simulation equipment of evaluating according to claims 22 and 36 respectively, wherein said step of processing at least one radio resource management event comprises the step of:

executing at least one radio resource management algorithm (page 43, section 4.3.1, e.g., radio resource management).

Regarding claim 26, Leila discloses the method and the simulation equipment of evaluating according to claims 25, wherein said radio resource management algorithm comprises an admission control algorithm (page 43, section 4.3.1, e.g., admission control).

Regarding claim 27, Leila discloses the method of evaluating according to claim 26, comprising the steps of:

detecting that at least one admission control threshold has been exceeded for at least one of the users belonging to the currently activated user block (page 171, section 7.2.2); and

taking said user out of service (page 171, section 7.2.2, e.g., it then accepts or rejects the request service (RABs) depending on specified acceptance thresholds).

Regarding claim 28, Leila discloses the method of evaluating according to claim 25, wherein said radio resource management algorithm comprises a congestion control algorithm (page 171, section 7.2.2).

Regarding claim 29, Leila discloses the method of evaluating according to claim 28, comprising the steps of:

detecting that at least one congestion control threshold has been exceeded for at least one of the users belonging to the currently activated user block page 171, section 7.2.2); and

taking said user out of service (page 171, section 7.2.2).

Regarding claim 30, Leila discloses the method of evaluating according to claim 25, wherein said radio resource management algorithm comprises an outage control algorithm (page 51, section 5.1.1; page 53, e.g., while in static simulation outage is defined as the event of the C/I ration falling bellow a certain threshold).

Regarding claim 31, Leila discloses the method of evaluating according to claim 30, comprising the steps of:

detecting that at least one power threshold for the outage control has been exceeded for at least one of the users belonging to the currently activated user block (page 53; page 164; page 157); and

taking said user out of service (page 171, section 7.2.2).

Regarding claim 32, Leila discloses the method of evaluating according to claim 23, wherein said step of repeating said steps of simulating said mobile telephone network comprises:

a step of collecting and processing statistical results (page 87, section 5.4.5); and

a step of checking the accuracy of the resulting statistical data (page 87, section 5.4.5, e.g., average and standard deviation for each sector's traffic channel).

Regarding claim 33, Leila discloses the method of evaluating according to claim 32, wherein said step of collecting and processing statistical results comprises the steps of:

collecting statistical results relating to simulated network values (page 87, section 5.4.5); and

obtaining at least one accuracy indicator for each of said simulated network values (page 87, section 5.4.5; noted the average and standard deviation for each sector's traffic channels power level is step of obtaining one accuracy indicator for each of simulated network values).

Regarding claim 34, Leila discloses the method of evaluating according to claim 33, wherein said at least one accuracy indicator comprises at least one parameter selected from the confidence interval of a statistical value and the stability indicator of a statistical value (pages 52-53, section 5.1.1.1, e.g., statistical pixel simulation).

Regarding claim 35, Leila discloses the method of evaluating according to claim 32, wherein said step of checking the accuracy of the resulting statistical data comprises the steps of:

comparing, for each simulated network value, said at least one accuracy indicator with the corresponding predetermined accuracy threshold (page 53; page 65; page 74, e.g., results from the ON/OFF simlations have a consistently larger mean number of simultaneous active users compared to the results of the Exp-Exp simulations); and

terminating the simulation when said at least one accuracy indicator reaches said predetermined accuracy threshold (page 74, noted the ON/OFF simulation).

Claim 38 is rejected with the same reasons set forth to claims 23-24.

Claim 39 is rejected with the same reasons set forth to claim 27.

Claim 40 is rejected with the same reasons set forth to claims 28-31 .

Claim 41 is rejected with the same reasons set forth to claims 32-35.

Claim 42 is drawn to a program for an electronic computer, loadable into the memory of at least one electronic computer and comprising code means for generating steps of claims 22-35. Therefore, the same rationale applied to claims 22-35 applies. In addition, Leila inherently discloses a computer program product, i.e., given that Leila discloses a process, the process would be implemented by a processor that requires a computer program product, e.g., a RAM, to function.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617